

REMARKS

In the final Office Action dated April 19, 2006, claim 17, 22-28, 30, 31 and 35 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,210,102 to Joslin; claims 17, 19, 25, 29-31 and 36 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,613,794 to Isaac et al.; and claim 42 was rejected under 35 U.S.C. § 103(a) as being unpatentable in view of the '102 patent and U.S. Patent No. 6,102,605 to Emmons. The Office Action also indicates that claims 37-40 are directed to allowable subject matter.

With this paper, claim 37 has been canceled and independent claim 17 has been amended to recite the limitations of claim 37. The dependency of claim 38 has been changed in view of the cancellation of claim 37. Accordingly, it is submitted that independent claim 17 and dependent claims 19, 22-24, 29 and 38 are now allowable.

Entry of this Amendment After Final is respectfully requested as the amendments to claims 17 and 38 do not raise any new issues.

Rejections under 35 U.S.C. § 112

In the Office Action dated April 19, 2006, claim 26 was rejected under 35 U.S.C. § 112, ¶ 2 as being indefinite. In particular, the Office Action states “[r]ecitation ‘an angle of greater than or less than 180 degrees’ in claim 26 is unclear.” This limitation was previously deleted from claim 26 in the Amendment dated February 9, 2006. Accordingly, it is submitted that this rejection is improper and should be withdrawn.

Prior Art Rejections under 35 U.S.C. § 102 and § 103

As noted above, claim 17, 22-28, 30, 31 and 35 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,210,102 to Joslin; claims 17, 19, 25, 29-31 and 36 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,613,794 to Isaac et al.; and claim 42 stands rejected under 35 U.S.C. § 103(a) as being unpatentable in view of the '102 patent and U.S. Patent No. 6,102,605 to Emmons.

The Joslin '102 patent discloses a male pipe end 10, a female pipe end 12 and an annular groove 16 formed in the male pipe end. A liquid sealant is coated on the outside of the male pipe end 10 or on the inside of the female pipe end 12, see column 2, lines 43-49. "As a first step in connecting the two pipe ends, they are telescoped together in the manner shown in FIGURE 2," see column 2, lines 28-30. The Joslin patent discloses that the illustrated pipe is intended for uses like "underground sprinkler systems for golf courses," see col. 1, line 71 through col. 2, line 2.

The Isaac et al. '794 patent discloses a tubular frame (e.g., a bicycle frame 66) with adhesively bonded tubular joints.

In general, a hydroforming process forms a tubular assembly into a desired final shape by placing the tubular assembly into a die of the desired final shape and introducing a pressurized fluid into the interior of the tubular assembly. The pressurized fluid permanently deforms the tubular assembly so as to fit the die and, thereby, form the final structure.

Claim 25 recites a hydroformed frame. Neither Joslin nor Isaac et al. provides a disclosure, teaching or suggestion of a frame structure that has been permanently deformed, let alone one that has been permanently deformed by hydroforming. In addition, U.S. Patent No. 6,102,605 to Emmons does not disclose, teach or suggest this aspect of the present invention recited in claim 25 and the claims dependent therefrom.

MPEP §2113, relating to Product-by-Process Claims, states:

PRODUCT-BY-PROCESS CLAIMS ARE NOT LIMITED TO THE MANIPULATIONS OF THE RECITED STEPS, ONLY THE STRUCTURE IMPLIED BY THE STEPS

"[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." (Emphasis Added)

In distinguishing claim 25, Applicants are not relying on the hydroforming process, per se, to distinguish over the prior art cited in the current Final Office Action. The structure of the tubular frame recited in claim 25 is one that has been "permanently deformed" by a

hydroforming operation. A material that has been permanently deformed is different from one that has not been permanently deformed. Likewise, a frame structure that has been permanently deformed is different from one that has not been permanently deformed. Even two structures that are permanently deformed using two different deforming techniques can be different. For example, a tubular frame structure that is mechanically bent into a desired frame design is going to deform differently than the same tubular frame structure that is hydroformed into the desired frame design. Having the fluid in the tubes forming the frame, as in hydroforming, provides structural support for the tubular walls while the frame is permanently deformed. Such structural support for the tubular walls is not present with simple mechanical bending of the same tubular frame structure. Therefore, the final structure of a hydroformed tubular frame is going to be different than the final structure of the same tubular frame that has either (1) not been permanently deformed or (2) been permanently deformed by a different process.

Because none of the tubular frame structures taught by the prior art of record, cited against claim 25 and its dependent claims, have been hydroformed into a desired shape, none of the prior art tubular frames have the same structure as the frame recited in claim 25. Therefore, it is submitted that the '102 Joslin patent, the '794 Isaac et al. patent, and the '605 Emmons patent, whether taken singly or in combination, do not disclose, teach or suggest each and every element recited in claims 25-28, 30, 31, 33-36 and 39-42. Accordingly, the §102 rejection of these claims was improper and this rejection should be withdrawn. In addition, because the §102 rejection of these claims was improper, the final Office Action was premature and, as a result, it would be improper for the next patent office action, if any, to be made final. See MPEP §§706.07(a), (c) and (d).

Conclusion

In view of the above remarks and claim amendments, Applicants submit that claims 17, 19, 22-31 and 33-36 and 38-42 define patentably over the prior art. Early notification of allowable subject matter is respectfully requested.

Respectfully submitted,

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Date

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